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SECOND REPORT¹ OF THE COMMITTEE ON LIBRARIES—A LIST OF COLLEGE MATHEMATICAL TEXT-BOOKS.

Preliminary Statement. At the meeting of the Association held in Chicago in December, 1917, the Library Committee was requested to prepare a list of mathematical text-books used in colleges, thus bringing together in compact and accessible form the bulk of the available information pertaining to this field of instruction. The Committee, in following out the request, began by ascertaining the names and addresses of the various publishing houses of America, consulting for this purpose the so-called *Publisher's Trade List Annual*. A letter was then sent to each house asking for a full list of their mathematical texts of college grade. Replies were eventually received in nearly every instance, and the findings of the Committee as thus determined constitute the basis of the subjoined list. Books published independently, as by an author himself, have also been included whenever coming to the attention of the Committee.

It should be said that some omissions and errors doubtless occur, as would be the case whatever plan of procedure might be followed in attempting to prepare such a list, but since nearly every book listed has been personally inspected, it is hoped that errors are few. It is possible that a supplementary list which shall take account of omissions may be published later. The Chairman of the Committee will be glad to receive any information tending to make the report more accurate and more complete. It may be well to note that the list pertains only to text-books (as distinguished from books of reference) by American authors (or translators), and published in America, since even with such restrictions the list is of considerable length.

FLORIAN CAJORI, University of California; W. R. LONGLEY, Yale University;
 E. S. CRAWLEY, University of Pennsylvania; R. E. ROOT, U. S. Naval Academy;
 SOLOMON LÉFSCHETZ, University of Kansas; W. B. FORD, University of Michigan, *Chairman.*

COLLEGE ALGEBRA.

A. FIRST COURSE.

ASHTON (C. H.) and MARSH (W. R.) *College Algebra.* Scribner, 1907.² 9 + 279 pp. \$1.50.
 BOWSER (E. A.) *College Algebra.* Heath, 1890. 18 + 540 pp. \$1.60.
 BRENKE (W. C.) *Advanced Algebra.* Century, 1917. 7 + 196 pp. \$1.25.
 COLLINS (J. V.) *Advanced Algebra.* American Book, 1913. 12mo. 10 + 342 pp. \$1.00.
 CRATHORNE (A. R.) See RIETZ (H. L.).
 DAVISSON (S. C.) *College Algebra.* Macmillan, 1910. 12mo. 16 + 243 pp. \$1.50.
 DICKSON (L. E.) *College Algebra.* Wiley, 1902. 12mo. 7 + 214 pp. \$1.50.
 DOWNEY (J. F.) *Higher Algebra.* American Book, 1901. 12mo. 416 pp. \$1.50.
 FINE (H. B.) *College Algebra.* Ginn, 1904. 12mo. 8 + 595 pp. \$2.00.
 FISHER (G. E.) and SCHWATT (I.) *Higher Algebra.* Macmillan. 12mo. 615 pp. \$2.00.
 FITE (W. B.) *College Algebra.* Revised edition. Heath, 1918. 5 + 320 pp. \$1.56.

¹ Cf. this MONTHLY, October, 1917.

² It is intended that here, and in the following titles, the date shall be that of the latest edition but not of the latest reprint.

HAWKES (H. E.) *Advanced Algebra*. Ginn, 1905. 8vo. 14 + 285 pp. \$1.60.
Higher Algebra. Ginn, 1913. 8vo. 5 + 222 pp. \$1.60.

MARSH (W. R.) See ASHTON (C. H.).

MERRILL, HELEN A., and SMITH, CLARA E. *A First Course in Higher Algebra*. Macmillan, 1917. 12mo. 16 + 247 pp. \$1.50.

RIETZ (H. L.) and CRATHORNE (A. R.) *College Algebra*. Holt, 1910. 8vo. 14 + 261 pp. \$1.60.

SCHULTZE (A.) *Advanced Algebra*. Macmillan, 1908. 12mo. 14 + 582 pp. \$1.25.

SCHWATT (I.) See FISHER (G. E.).

SLAUGHT (H. E.) See WILCZYNSKI (E. J.).

SKINNER (E. B.) *College Algebra*. Macmillan, 1917. 12mo. 7 + 263 pp. \$1.50.

SMITH, CLARA E. See MERRILL, HELEN A.

TAYLOR (J. M.) *College Algebra*. Allyn and Bacon, 1889. 12mo. 9 + 317 pp. \$1.50.

WELLS (W.) *College Algebra*. Heath, 1890. 6 + 544 pp. \$1.60

WENTWORTH (G. A.) *College Algebra*. Revised edition. Ginn, 1902. 12mo. 6 + 530 pp. \$1.80.
Higher Algebra. Ginn, 1891. 12mo. 6 + 521 pp. \$1.60.

WILCZYNSKI (E. J.) and SLAUGHT (H. E.) *College Algebra with Applications*. Allyn and Bacon, 1916. 20 + 507 pp. \$2.00.

B. SECOND (ADVANCED) COURSE.

BÖCHER (M.) *Introduction to Higher Algebra*. Macmillan, 1907. 8vo. 11 + 321 pp. \$1.90.

GEOMETRY (ANALYTICAL AND PROJECTIVE).

A. ANALYTICAL GEOMETRY.

ALLEN (J.) See TANNER (J. H.).

ASHTON (C. H.) *Plane and Solid Analytic Geometry*. Revised edition. Scribner, 1916. 12mo. 14 + 278 pp. \$1.40.

BAILEY (F. H.) and WOODS (F. S.) *Plane and Solid Analytic Geometry*. Ginn, 1897. 8vo. 12 + 371 pp. \$2.40.

BÖCHER (M.) *Plane Analytic Geometry*. Holt, 1915. 13 + 235 pp. \$1.72.

BÖCHER (M.) See BRIGGS (G. R.).

BOWSER (E. A.) *An Elementary Treatise on Analytic Geometry*. Twenty-fifth edition. Van Nostrand, 1915. 319 pp. \$1.75.

BRIGGS (G. R.) *Elements of Plane Analytic Geometry*. Seventh edition revised and enlarged by M. Böcher. Wiley, 1907. 12mo. 5 + 191 pp. \$1.00.

CANDY (A. L.) *Elements of Plane and Solid Analytic Geometry*. Heath, 1908. 8vo. 10 + 266 pp. \$1.64. Edition with supplement, 1909. 12 + 368 pp. \$2.20.

CRAWLEY (E. S.) and EVANS (H. B.) *Analytic Geometry*. E. S. Crawley, Philadelphia, 1918. 12mo. 14 + 239 pp. \$1.60.

DOWLING (L. W.) and TURNEAURE (F. E.) *Analytic Geometry*. Holt, 1914. 12 + 266 pp. \$1.80.

EVANS (H. B.) See CRAWLEY (E. S.).

FINE (H. B.) and THOMPSON (H. D.) *Coördinate Geometry*. Macmillan, 1910. 12mo. 10 + 300 pp. + 9 plates. \$1.60.

GALE (A. S.) See SMITH (P. F.).

HARDY (A. S.) *Analytic Geometry*. Ginn, 1889. 8vo. 12 + 229 pp. \$1.80.

HOPKINS (L. A.) See ZIWET (A.).

LAMBERT (P. A.) *Analytic Geometry for Technical Schools and Colleges*. Macmillan, 1897. 12mo. 11 + 216 pp. \$1.50.

NICHOLS (E. W.) *Analytic Geometry*. Revised edition. Heath, 1918. 11 + 292 pp. \$1.48.

PHILLIPS (H. B.) *Analytic Geometry*. Wiley, 1915. 12mo. 7 + 197 pp. \$1.50.

RIGGS (N. C.) *Analytic Geometry*. Macmillan, 1910. 12mo. 11 + 294 pp. \$1.75.

ROBERTS, MARIA M., and COLPITTS, JULIA T. *Analytic Geometry*. Wiley, 1918. 12 mo. 10 + 229 pp. \$1.60.

SCHMALL (C. N.) *First Course in Analytical Geometry, Plane and Solid*. Van Nostrand, 1905. 7 + 318 pp. \$1.75.

SICELOFF (L. P.) See WENTWORTH (G.).
 SISAM (C. H.) See SNYDER (V.).
 SMITH (D. E.) See WENTWORTH (G.).
 SMITH (P. F.) and GALE (A. S.) *Elements of Analytic Geometry*. Ginn, 1904. 8vo. 12 + 424 pp. \$2.40.
Introduction to Analytic Geometry. Ginn, 1905. 8vo. 8 + 217 pp. \$1.40.
New Analytic Geometry. Ginn, 1912. 12mo. 10 + 342 pp. \$1.80.
 SNYDER (V.) and SISAM (C. H.) *Analytic Geometry of Space*. Holt, 1914. 11 + 289 pp. \$2.50.
 TANNER (J. H.) and ALLEN (J.) *An Elementary Course in Analytic Geometry*. American Book, 1898. 12mo. 20 + 418 pp. \$2.00.
Brief Course in Analytic Geometry. American Book, 1911. 12mo. 10 + 282 + 24 pp. \$1.50.
 TRACEY (J. I.) See WILSON (W. A.).
 WENTWORTH (G. A.) *Elements of Analytic Geometry*. Second edition. Ginn, 1891. 12mo. 12 + 273 + 27 pp. \$1.60.
 WENTWORTH (G.), SMITH (D. E.) and SICELOFF (L. P.) *Plane Analytic Geometry*. Ginn. (In press.)
 WILSON (W. A.) and TRACEY (J. I.) *Analytic Geometry*. Heath, 1915. 10 + 212 pp. \$1.28.
 WOODS (F. S.) See BAILEY (F. H.).
 ZIWET (A.) and HOPKINS (L. A.) *Elements of Analytic Geometry*. Macmillan, 1916. 12mo. 7 + 280 pp. \$1.60.

B. PROJECTIVE GEOMETRY.

DOWLING (L. W.) *Projective Geometry*. McGraw-Hill, 1917. 12mo. 14 + 215 pp. \$2.00.
 EMCH (A.) *An Introduction to Projective Geometry and its Applications. An Analytic and Synthetic Treatment*. Wiley, 1905. 8vo. 7 + 267 pp. \$2.50.
 LEHMER (D. N.) *Synthetic Projective Geometry*. Ginn, 1917. 12mo. 13 + 123 pp. \$1.12.
 LING (G. H.) See WENTWORTH (G.).
 SMITH (D. E.) See WENTWORTH (G.).
 WENTWORTH (G.), SMITH (D. E.) and LING (G. H.) *Projective Geometry*. Ginn. (In press.)
 VEBLEN (O.) and YOUNG (J. W.) *Projective Geometry*. Ginn. 8vo. Vol. 1, 1910. 10 + 342 pp. \$4.00; Vol. 2, 1918. 12 + 511 pp. \$5.00.
 YOUNG (J. W.) See VEBLEN (O.).

TRIGONOMETRY.

ANDEREGG (F.) and ROE (E. D.) *Trigonometry*. Revised edition. Ginn, 1913. 12mo. 9 + 108 pp. \$0.96.
 ASHTON (C. H.) and MARSH (W. R.) *Plane and Spherical Trigonometry, with Tables*. Scribner, 1902. 12mo. 10 + 157 + 93 pp. \$1.25.
 BARKER (E. H.) *Plane Trigonometry with Tables*. Blakiston, 1917. 8vo. 7 + 172 pp. \$1.00.
 BAUER (G. N.) and BROOKE (W. E.) *Plane and Spherical Trigonometry*. Second revised edition. Heath, 1917. 12mo. 11 + 174 pp. \$1.24. With Tables, 11 + 174 + 5 + 139. \$1.60.
 BÖCHER (M.) and GAYLORD (H. D.) *Trigonometry*. Holt, 1914. 12mo. 9 + 142 pp. \$1.12.
 BOWSER (E. A.) *Elements of Trigonometry*. Heath. 6 + 172 pp. \$1.08. With Tables, \$1.60.
A Treatise on Plane and Spherical Trigonometry and its Applications to Astronomy and Geodesy. Heath, 1892. 13 + 368 pp. \$1.68.
 BRENKE (W. C.) *Elements of Trigonometry*. Century, 1917. 6 + 121 + 39 pp. \$1.25.
 BROOKE (W. E.) See BAUER (G. N.).
 BUCHANAN (A. H.) *Plane and Spherical Trigonometry*. Wiley, 1907. 8vo. 6 + 96 pp. \$1.00.
 CHAUVENET (W.) *A Treatise on Plane and Spherical Trigonometry*. Ninth edition. Lippincott, 1875. 8vo. 256 pp. \$1.32.
 CONANT (L. L.) *Plane Trigonometry*. American Book, 1909. 8vo. 183 pp. \$0.90.
 CRAWLEY (E. S.) *Elements of Plane and Spherical Trigonometry*. New and revised edition. E. S. Crawley, Philadelphia, 1910. 8vo. 4 + 186 pp. \$1.10. With Tables, 4 + 186 + 32 + 76 pp., \$1.50.
A Short Course in Plane and Spherical Trigonometry. E. S. Crawley, Philadelphia, 1902. 8vo. 116 pp. \$0.90. With Tables, 116 + 28 pp. \$1.25.
 DURFEE (W. P.) *Elements of Plane Trigonometry*. Ginn, 1900. 12mo. 6 + 105 pp. \$1.00.
 FOERING (H. A.) See LAMBERT (P. A.).

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FRINK (F. G.) See HALL (A. G.).

GAYLORD (H. D.) See BÖCHER (M.).

GODDARD (E. C.) See LYMAN (E. A.).

GORE (J. H.) *Elements of Plane and Spherical Trigonometry*. Putnam, 1907. 12mo. 6 + 122 pp. \$1.20. With Tables, 6 + 122 + 17 + 62 pp. \$1.20.

GRANVILLE (W. A.) *Plane and Spherical Trigonometry*. Ginn, 1909. 8vo. 11 + 264 pp. \$1.00. With Tables, \$1.45.

HALL (A. G.) and FRINK (F. G.) *Plane Trigonometry with Tables*. Holt, 1909. 8vo. 10 + 148 + 93 pp. \$1.25.

Plane and Spherical Trigonometry. Holt, 1910. 8vo. 10 + 176 pp. \$1.20

HARDING (A. M.) and TURNER (J. S.) *Plane Trigonometry*. Putnam, 1915. 12mo. 13 + 158 pp. \$0.90. With Tables, 13 + 158 + 51 pp. \$1.10.

HILL (G. A.) See WENTWORTH (G. A.).

HUN (J. G.) and MACINNES (C. R.) *The Elements of Plane and Spherical Trigonometry*. Macmillan, 1911. 8vo. 101 pp. \$0.90. With Tables, 205 pp. \$1.35.

INGOLD (L.) See KENYON (A. M.).

KENYON (A. M.) and INGOLD (L.) *Trigonometry*. Macmillan, 1913. 12mo. 11 + 132 pp. \$1.20. With Tables, 11 + 132 + 18 + 124 pp. \$1.50.

LAMBERT (P. A.) and FOERING (H. A.) *Plane and Spherical Trigonometry*. Macmillan, 1905. 12mo. 8 + 104 pp. \$0.60.

LEIGH (C. W.) See PALMER (C. I.).

LYMAN (E. A.) and GODDARD (E. C.) *Plane and Spherical Trigonometry, with Tables*. Allyn and Bacon, 1900. 8vo. 7 + 139 + 66 pp. \$1.20.

MARSH (W. R.) See ASHTON (C. H.).

MACINNES (C. R.) See HUN (J. G.).

MORITZ (R. E.) *Elements of Plane Trigonometry*. Wiley, 1911. 8vo. 14 + 361 + 91 pp. \$2.00.

Plane and Spherical Trigonometry. Wiley, 1913. 8vo. 16 + 357 + 67 + 96 pp. \$2.50.

Text Book of Spherical Trigonometry. Wiley, 1913. 8vo. 6 + 67 pp. \$1.00.

MURRAY (D. A.) *Elements of Plane Trigonometry*. Longmans, 1911. 12mo. 9 + 136 pp.

NICHOLSON (J. W.) *Elements of Plane and Spherical Trigonometry*. Macmillan, 1898. 8vo. 8 + 101 pp. \$0.90. With Tables, 8 + 101 + 44 pp. \$1.10.

PALMER (C. I.) and LEIGH (C. W.) *Plane and Spherical Trigonometry*. Second edition revised and enlarged. McGraw-Hill, 1916. 8vo. 11 + 188 pp. \$1.00. With Tables, 11 + 188 + 132 pp. \$1.50.

PASSANO (L. M.) *Plane and Spherical Trigonometry*. Macmillan, 1918. 12mo. 15 + 140 pp. \$1.25.

PURYEAR (C.) See TAYLOR (T. U.).

ROE (E. D.) See ANDERECK (F.).

ROBBINS (E. R.) *Plane Trigonometry*. American Book, 1909. 8vo. 13 + 153 pp. \$0.60.

ROTHROCK (D. A.) *Elements of Plane and Spherical Trigonometry*. Macmillan, 1910. 8vo. 11 + 147 pp. \$1.20. With Tables, 11 + 147 + 15 + 99 pp. \$1.50.

SLAUGHT (H. E.) See WILCZYNSKI (E. J.).

SMITH (D. E.) See WENTWORTH (G.).

SMITH (P. F.) See GRANVILLE (W. A.).

TAYLOR (J. M.) *Plane Trigonometry*. Ginn, 1904. 12mo. 8 + 171 pp. \$0.90.

Plane and Spherical Trigonometry. Ginn, 1905. 12mo. 9 + 210 + 24 pp. \$1.20.

TAYLOR (T. U.) and PURYEAR (C.) *Elements of Plane and Spherical Trigonometry*. Ginn, 1902. 8vo. 5 + 160 + 1 + 67 pp. \$1.40.

TURNER (J. S.) See HARDING (A. M.).

WELLS (W.) *New Plane Trigonometry*. Heath, 1911. 5 + 110 pp. \$0.76. With Tables, \$0.96.

New Plane and Spherical Trigonometry. Heath, 1896. 8vo. 5 + 126 pp. \$1.28. With Tables, \$1.60.

Complete Trigonometry. Revised edition. Heath, 1911. 6 + 163 + 9 pp. \$1.08. With Tables, \$1.24.

WENTWORTH (G. A.) *Plane Trigonometry*. Second revised edition. Ginn, 1903. 12mo. 6 + 141 + 21 pp. \$0.75. With Tables, 6 + 141 + 21 + 20 + 75 pp. \$1.00.

Plane and Spherical Trigonometry. Second revised edition. Ginn, 1903. 8vo. 7 + 207 + 25 pp. \$1.00. With Tables, 7 + 207 + 25 + 20 + 76. \$1.20. [Tables by G. A. Wentworth and G. A. Hill.]

Plane Trigonometry, Surveying and Tables. Second revised edition. Ginn, 1903. 8vo. 7 + 238 + 23 + 20 + 75 pp. \$1.48.

Plane and Spherical Trigonometry, Surveying and Tables. Second revised edition. Ginn, 1903. 8vo. 8 + 304 + 27 + 20 + 75 pp. \$1.60.

Plane and Spherical Trigonometry, Surveying and Navigation. Second revised edition, 1903. 12mo. 452 pp. \$1.48.

WENTWORTH (G.) and SMITH (D. E.) *Plane Trigonometry.* Ginn, 1914. 8vo. 5 + 188 pp. \$1.08. With Tables, 5 + 188 + 5 + 104 pp. \$1.30.

Plane and Spherical Trigonometry. Ginn, 1915. 8vo. 5 + 230 + 26 pp. \$1.36. With Tables, 8vo. 5 + 230 + 26 + 5 + 104 pp. \$1.60.

WILCZYNSKI (E. J.) and SLAUGHT (H. E.) *Plane Trigonometry and Applications, with Tables.* Allyn and Bacon, 1914. 8vo. 11 + 265 + 20 + 97 pp. \$1.25.

GENERAL (COMBINED) COURSES.

A. ELEMENTARY.

BAILEY (F. H.) See WOODS (F. S.).

BENEDICT (H. Y.) See KARPINSKI (L. C.).

CALHOUN (J. W.) See KARPINSKI (L. C.).

KARPINSKI (L. C.), BENEDICT (H. Y.) and CALHOUN (J. W.) *Unified Mathematics.* Heath, 1918. 12mo. 8 + 522 pp. \$2.80.

KELLER (S. S.) and KNOX (W. F.) *Mathematics for Engineering Students. Analytical Geometry and Calculus.* Van Nostrand, 1907. 8vo. 2 + 359 pp. \$2.00.

KENYON (A. M.) and LOVITT (W. V.) *Mathematics for Collegiate Students of Agriculture and General Science.* Macmillan, 1917. 12mo. 7 + 337 pp. \$2.00.

KNOX (W. F.) See KELLER (S. S.).

LOVITT (W. V.) See KENYON (A. M.).

MCCLENON (R. B.) *Introduction to the Elementary Functions.* With the editorial coöperation of W. J. RUSK. Ginn, 1918. 8vo. 9 + 244 pp. \$1.80.

MORGAN (F. M.) See YOUNG (J. W.).

PLANT (L. C.)

RANSOM (W. R.) *Freshman Mathematics.* Longmans, 1918. 12mo. 12 + 285 pp. \$1.35.

RUSK (W. J.) See MCCLENON (R. B.)

SЛИCHTER (C. S.) *Elementary Mathematical Analysis. A Text Book for First Year College Students.* Second edition revised and entirely reset. McGraw-Hill, 1918. 12mo. 18 + 497 pp. \$2.50.

SMITH (P. F.) and GRANVILLE (W. A.) *Elementary Analysis.* Ginn, 1910. 12mo. 10 + 223 pp. \$1.80.

WEBBER (W. P.) and PLANT (L. C.) *Introductory Mathematical Analysis.* Wiley, 1919. 12mo. 13 + 304 pp. \$2.00.

WOLFF (H. C.) *Mathematics for Agricultural Students.* McGraw-Hill, 1914. 12mo. 9 + 309 pp. \$1.80.

WOODS (F. S.) and BAILEY (F. H.) *A Course in Mathematics.* Ginn. 8vo. Vol. 1, 1907. 12 + 385 pp. \$2.75. Vol. 2, 1909. 11 + 410 pp. \$2.75.
Analytic Geometry and Calculus. Ginn, 1917. 8vo. 11 + 516 pp. \$3.60.

YOUNG (J. W.) and MORGAN (F. M.) *Elementary Mathematical Analysis.* Macmillan, 1917. 12mo. 13 + 548 pp. \$2.60.

ZIWET (A.) and HOPKINS (L. A.) *Analytical Geometry and Principles of Algebra.* Macmillan, 1913. 12mo. 10 + 369 pp. \$1.75.

B. ADVANCED

GOURLAT (E.) *Mathematical Analysis.* Translated from the French by E. R. Hedrick and O. Dunkel. Ginn. 8vo. Vol. 1, 1904, 548 pp., \$4.00. Vol. 2, Part 1, 1916, 259 pp., \$2.75. Part 2, 1917, 300 pp., \$2.75.

STEINMETZ (C. P.) *Engineering Mathematics; a Series of Lectures.* Third edition revised and enlarged. McGraw, Hill, 1917. 8vo. 19 + 321 pp. \$3.00.

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CALCULUS (FIRST COURSE).

BALINE (R. G.) *The Calculus and its Applications, a Practical Treatise for Beginners, Especially Engineering Students.* Van Nostrand, 1909. 9 + 321 pp. \$1.50.

BOWSER (E. A.) *An Elementary Treatise on the Differential and Integral Calculus.* Twenty-fourth edition enlarged. Van Nostrand, 1913. 12mo. 14 + 451 pp. \$2.25.

BYERLY (W. E.) *Elements of the Integral Calculus.* Second edition revised and enlarged. Ginn, 1889. 8vo. 16 + 339 + 14 + 32 pp. \$2.00.

CAMPBELL (D. F.) *The Elements of the Differential and Integral Calculus.* Macmillan, 1905. 12mo. 11 + 364 pp. \$2.10.

CAIN (W.) *A Brief Course in the Calculus.* Third edition revised. Van Nostrand, 1911. 8vo. 11 + 281 pp. \$1.75.

CHANDLER (G. H.) *Elements of the Infinitesimal Calculus.* Third edition rewritten. Wiley, 1907. 12mo. 6 + 319 pp. \$2.00.

DAVIS (E. W.) *The Calculus.* Macmillan, 1912. 12mo. 21 + 384 + 63 pp. \$2.10.

FRANKLIN (W. S.), MACNUTT (B.) and CHARLES (R. L.) *An Elementary Treatise on Calculus.* South Bethlehem, Pa., The Authors, 1913. 8vo. 10 + 253 + 41 pp. *Calculus Supplement.* To take the place of pages 1-41 of the 1913 edition. South Bethlehem, Pa., 1915. 8vo. 5 + 51 pp.

GOODENOUGH (G. A.) See TOWNSEND (E. J.).

GOULD (E. S.) *A Primer of the Calculus.* Sixth edition. Van Nostrand, 1918. 12mo. 91 pp. \$0.50.

GRANVILLE (W. A.) *Elements of the Differential and Integral Calculus.* Ginn. 8vo. 463 pp. \$2.80.

GUNTHER (C. O.) *Integration by Trigonometric and Imaginary Substitution.* Second edition revised. Van Nostrand, 1915. 8vo. 6 + 79 pp.

HUTCHINSON (J. I.) See SNYDER (V.).

JOHNSON (W. W.) *An Elementary Treatise on the Differential Calculus Founded on the Method of Rates.* Wiley, 1904. 8vo. 14 + 404 pp. \$3.00.

An Elementary Treatise on the Differential Calculus Founded on the Method of Rates. (Abridged Edition.) Wiley, 1908. 8vo. 10 + 191 pp. \$1.50.

An Elementary Treatise on the Integral Calculus Founded on the Method of Rates or Fluxions. Revised edition. Wiley, 1907. 8vo. 7 + 230 pp. \$1.50.

A Treatise on the Integral Calculus Founded on the Method of Rates. Wiley, 1907. 8vo. 14 + 440 pp. \$3.00.

HULBURT (L. S.) *Differential and Integral Calculus.* Longmans, 1912. 8vo. 18 + 481 pp. \$2.25.

LAMBERT (P. A.) *Differential and Integral Calculus for Technical Schools and Colleges.* Macmillan, 1898. 12mo. 10 + 245 pp. \$1.50.

LEIB (D. B.) *Problems in the Calculus with Formulas and Suggestions.* Ginn, 1915. 12mo. 12 + 224 pp. \$1.40.

LOVE (C. E.) *Differential and Integral Calculus.* Macmillan, 1917. 8vo. 18 + 343 pp. \$2.10.

MARCH (H. W.) and WOLFF (H. C.) *Calculus.* McGraw-Hill, 1917. 16 + 360 pp. \$2.00.

MURRAY (D. A.) *An Elementary Course in the Integral Calculus.* American Book, 1898. 14 + 288 pp. \$2.00.

NICHOLS (E. W.) *Differential and Integral Calculus.* Revised edition. Heath, 1918. 19 + 394 pp. \$2.20.

OSBORNE (G. A.) *Differential and Integral Calculus.* Revised edition. Heath, 1907. 12mo. 12 + 404 pp. \$2.20.

OSGOOD (W. F.) *A First Course in the Differential and Integral Calculus.* Revised edition. Macmillan, 1909. 12mo. 15 + 462 pp. \$2.00.

PHILLIPS (H. B.) *Differential Calculus.* Wiley, 1916. 12mo. 5 + 162 pp. \$1.25.

Integral Calculus. Wiley, 1917. 12mo. 5 + 194 pp. \$1.25. Combined edition, two volumes in one, 1917. \$2.00.

SMITH (P. F.) *Elementary Calculus.* American Book, 1902. 89 pp. \$1.25.

SNYDER (V.) and HUTCHINSON (J. I.) *Elementary Text-Book on the Calculus.* American Book, 1912. 12mo. 384 pp. \$2.20.

Differential and Integral Calculus. American Book, 1902. 16 + 320 pp. \$2.00.

TAYLOR (J. M.) *Elements of the Differential and Integral Calculus.* Revised edition. Ginn, 1898. 8vo. 13 + 269 pp. \$2.50.

TOWNSEND (E. J.) and GOODENOUGH (G. A.) *Essentials of Calculus*. Second edition revised. Holt, 1914. 12mo. 12 + 355 pp. \$2.00.
First Course in Calculus. Holt, 1910. 8vo. 12 + 466 pp.
 WOLFF (H. C.) See MARCH (H. W.).

MISCELLANEOUS.

BAKER (A. L.) *Elliptic Functions*. Wiley, 1890. 8vo. 5 + 118 pp. \$1.50.
 BARTON (S. M.) *An Elementary Treatise on the Theory of Equations*. Heath, 1899. 12 + 199 pp. \$1.60.
 BEMAN (W. W.) See KLEIN (F.).
 BLICHFELDT (H. F.) *Finite Collineation Groups with an Introduction to the Theory of Groups of Operators and Substitution Groups*. University of Chicago Press, 1917. 12mo. 11 + 194 pp. \$1.50.
 BLICHFELDT (H. F.) See also MILLER (G. A.).
 BURKHARDT (H.) *Theory of Functions of a Complex Variable*. Translated from the fourth German edition by S. E. Rasor. Heath. 8vo. 13 + 432 pp. \$4.00.
 BYERLY (W. E.) *Elementary Treatise on Fourier's Series*. Ginn, 1895. 8vo. 9 + 288 pp. \$3.00.
Harmonic Functions. Fourth edition. (Monograph Series.) Wiley, 1906. 8vo. 5 + 66 pp. \$1.00.
Introduction to the Calculus of Variations. (Mathematical Tracts for Physicists.) Harvard University Press, 1917. 8vo. 48 pp. 75 cents.
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REPORT OF THE NATIONAL COMMITTEE ON MATHEMATICAL REQUIREMENTS.

This Committee was appointed in 1916, by the Mathematical Association of America, with Professor J. W. YOUNG of Dartmouth College as chairman. Progress reports were published in this MONTHLY for October, 1916 and December, 1917. In the latter it was indicated that the following topics had been chosen for study: "The valid aims and purposes of mathematical study"; "Recent criticisms of mathematics"; "Formal discipline and the transfer of training"; "Desirable topics of algebra and their treatment"; "Scientific investigations"; "Questionnaires"; "World experience as to mathematical curricula and the training of teachers." Other topics for investigation have since been decided upon. The extraordinary importance of an exhaustive national inquiry in connection with such questions can hardly be overestimated. It is therefore with great satisfaction that the Committee announces that funds, sufficient for carrying on its work in a very thorough manner, have been secured.

At a meeting held in New York on May 22, 1919, the General Education Board appropriated the sum of \$16,000 for the use of the National Committee. The plan involves the appointment of one college man and one high school man

¹ Taken over and issued by the Yale University Press in 1913.